

# NOAA Climate Science & Services

## Monthly Climate Update

**Peering back at July ...  
looking ahead through October**

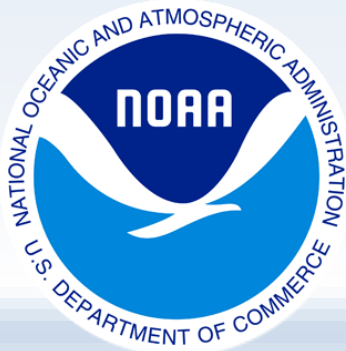


**Deke Arndt**

Chief, Climate Monitoring Branch, NOAA's National Climatic Data Center

**Ed O'Lenic**

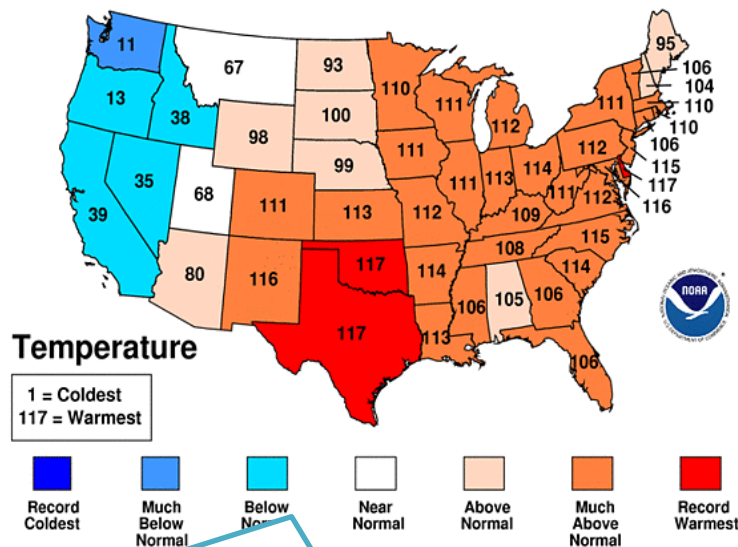
Chief, Operations Branch, NOAA's Climate Prediction Center



# July 2011 at a Glance

## July 2011 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA

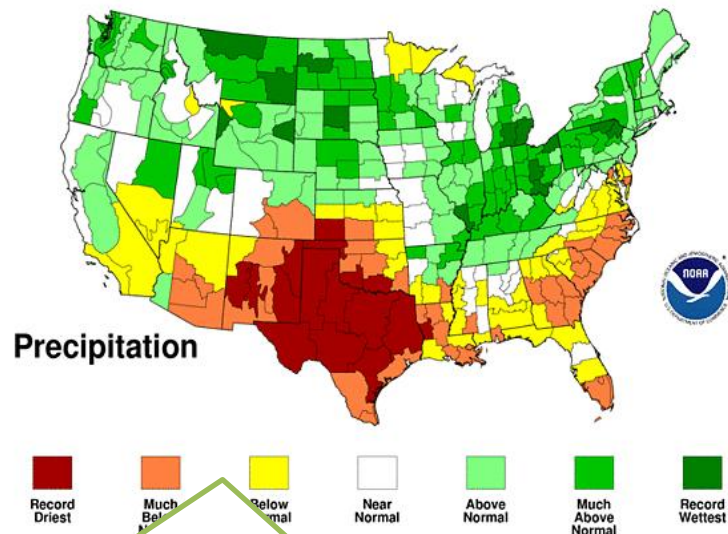


### 4<sup>th</sup> Warmest July on Record

- 77.0F Nationally averaged temperature
- Oklahoma and Texas had their warmest months on record
- **Oklahoma, July 2011: warmest month of any state, any month, on record.**

## Jan - Jul 2011

National Climatic Data Center/NESDIS/NOAA



### July: Below Normal National Precipitation

- Year to date precipitation is the lowest on record for New Mexico and Texas
- Drought continues in southern United States

# Daily Heat Records: July 2011



\*Not all July records have been received by the National Climatic Data Center

# Billion Dollar Weather Disasters

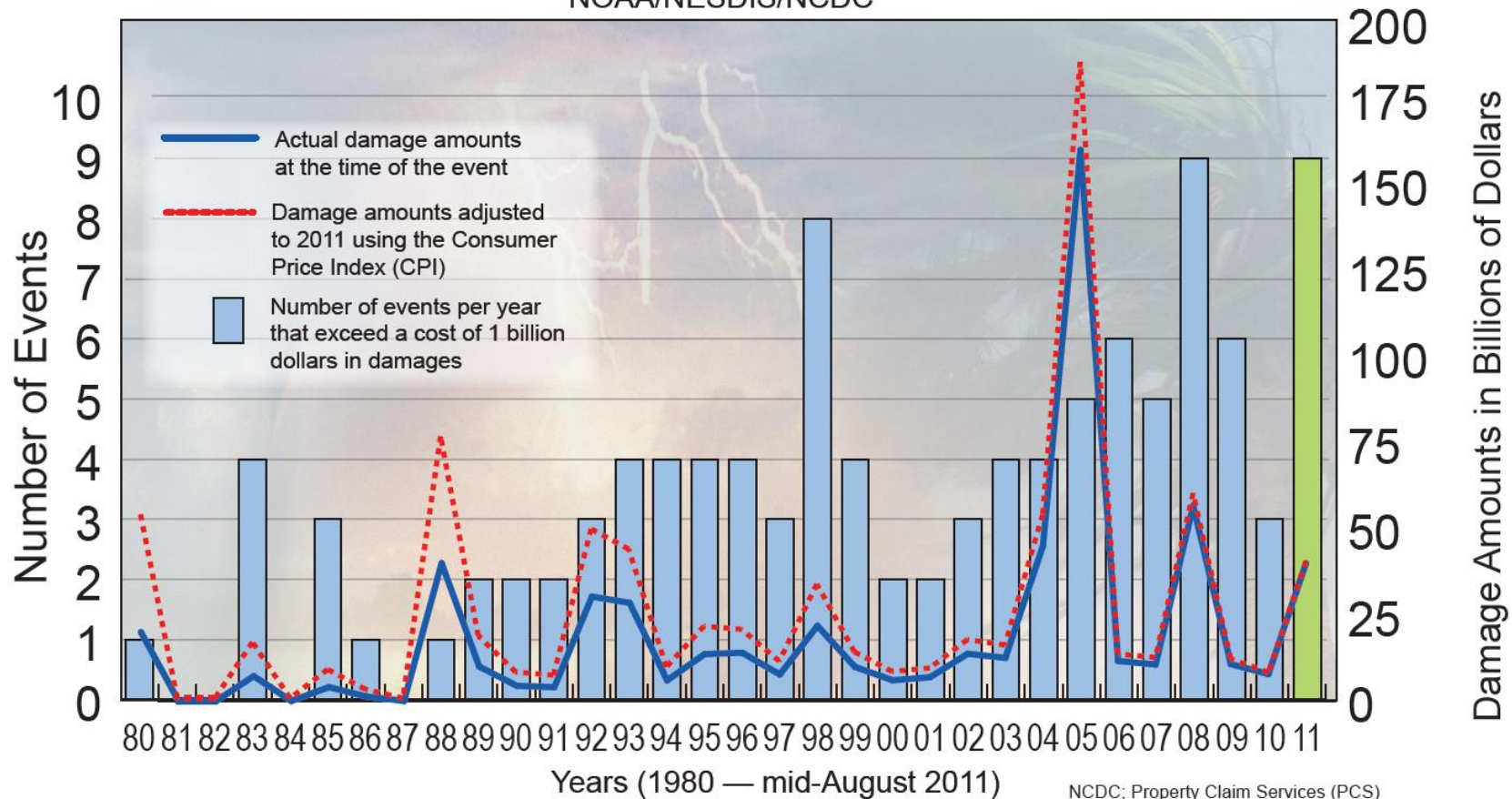
Nine events already in 2011



Billion Dollar U.S. Weather Disasters 1980 — mid-August 2011



NOAA/NESDIS/NCDC



Source: [www.ncdc.noaa.gov/oa/reports/billionz.html](http://www.ncdc.noaa.gov/oa/reports/billionz.html)

Note: 2011 figures based on preliminary information



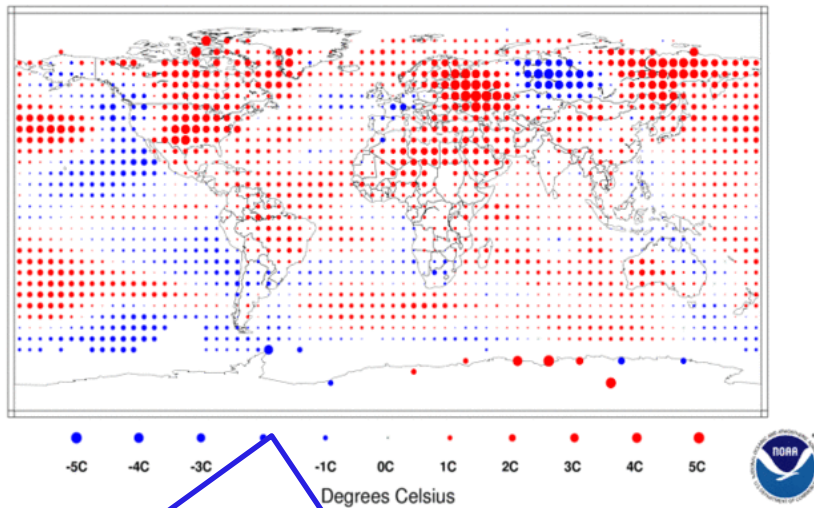
# Global Climate Highlights

- 7<sup>th</sup> Warmest July and 11<sup>th</sup> Warmest year-to-date on record**
- same ranks as June

## Temperature Anomalies July 2011

(with respect to a 1971-2000 base period)

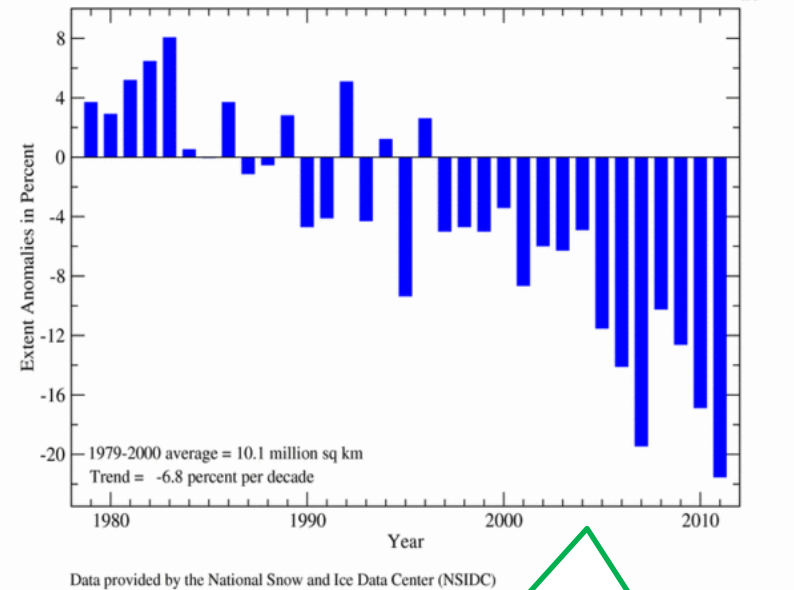
National Climatic Data Center/NESDIS/NOAA



### Streaks

- 35<sup>th</sup> consecutive July with global temperature above its 20<sup>th</sup> Century average (streak began July 1977)
- 317<sup>th</sup> consecutive month with temperature above its 20<sup>th</sup> Century average (streak began March 1985)

## Northern Hemisphere Sea Ice Extent July Anomalies, 1979-2011

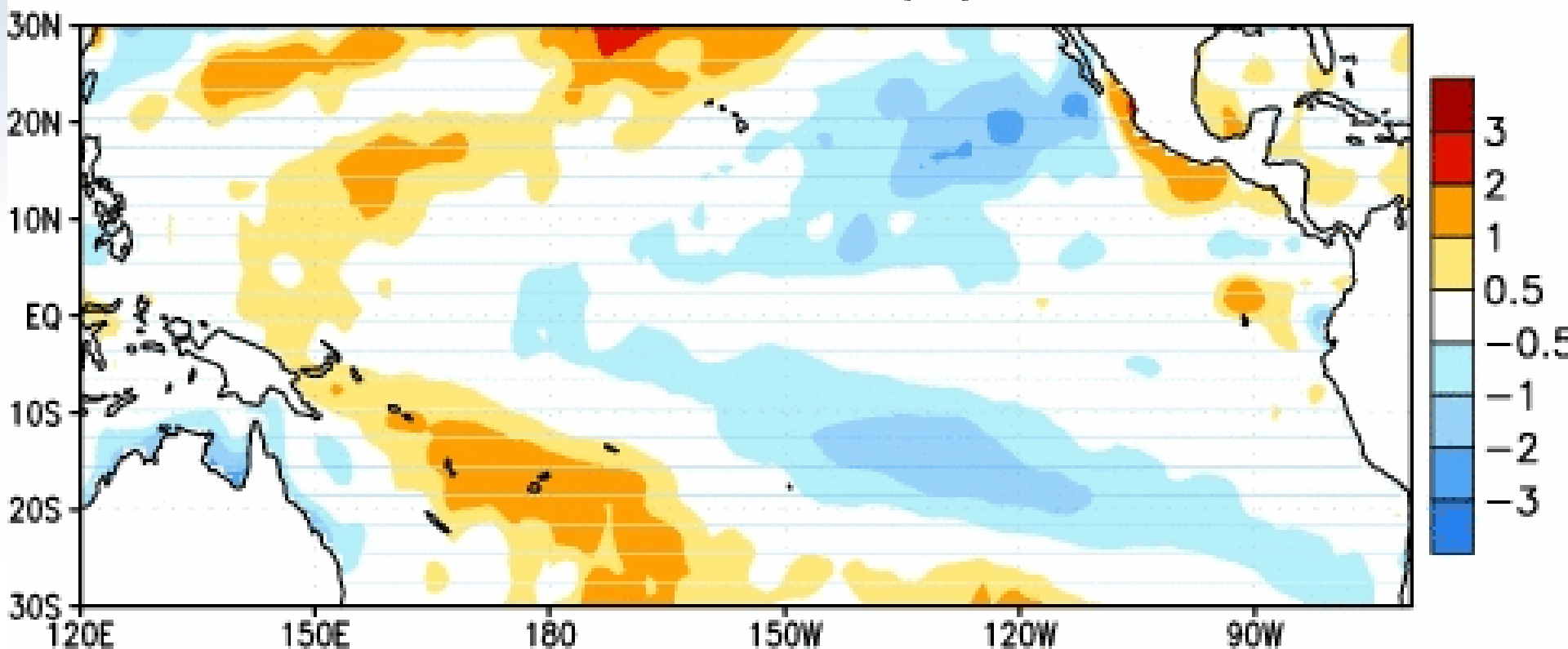


### Arctic Sea Ice:

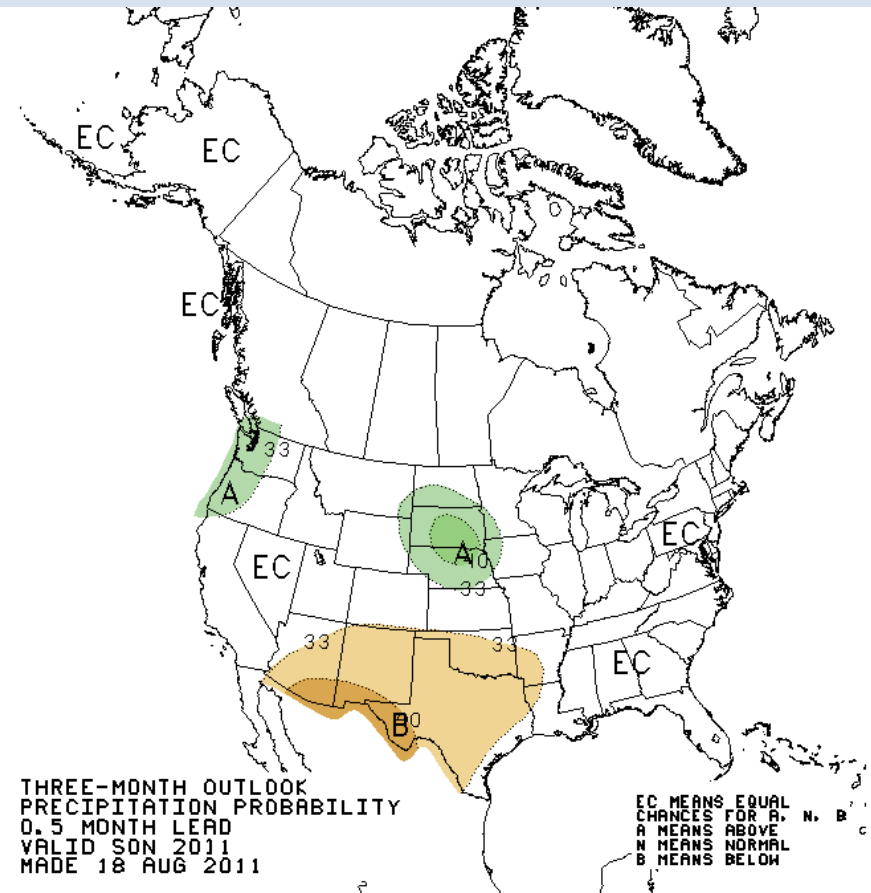
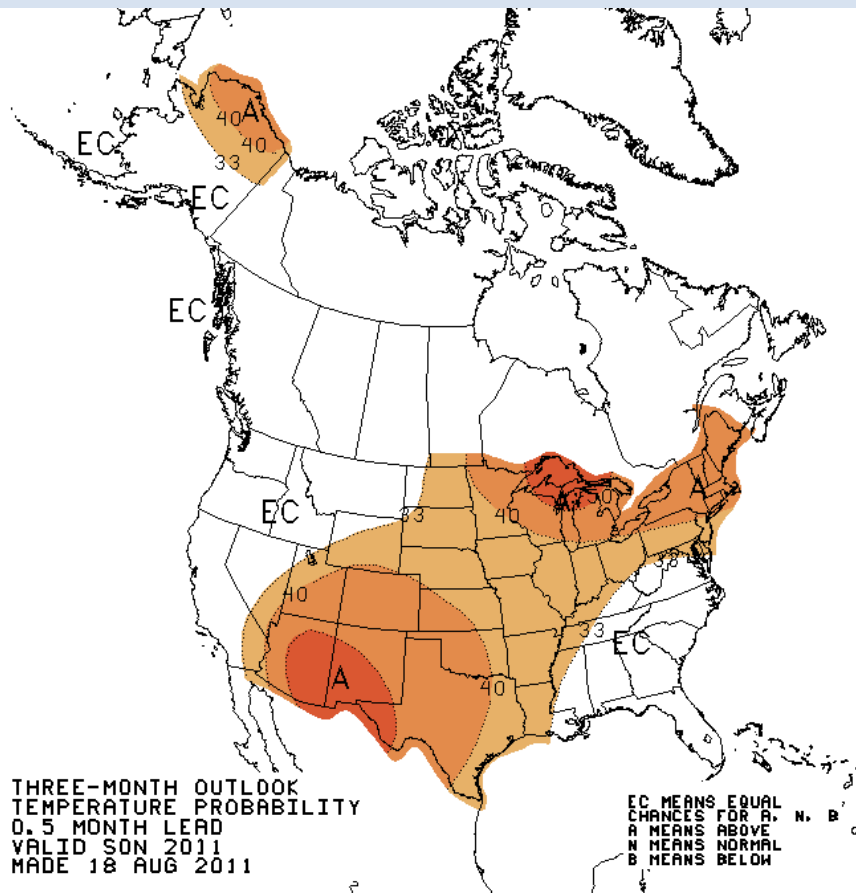
- July 2011 Arctic sea ice extent was the smallest on record for July, 2.18 million square km smaller than the 1979-2000 average.
- Broke the previous July record by 210,000 square km – approximately the size of Kansas.



Week centered on 25 MAY 2011  
SST Anomalies (°C)



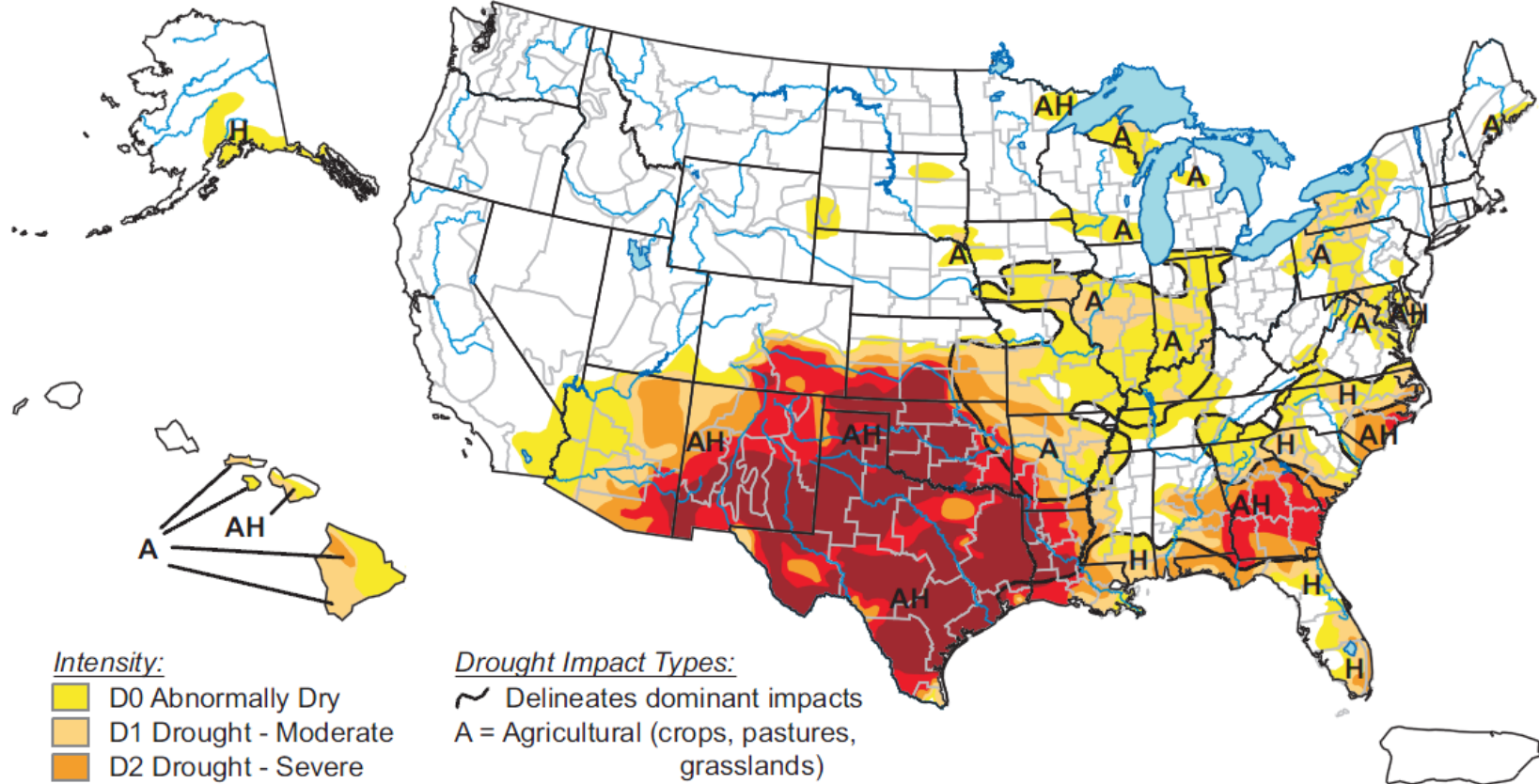
# CPC 3-Month Outlooks for September-October-November 2011



# U.S. Drought Monitor

August 16, 2011

Valid 8 a.m. EDT



## Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

## Drought Impact Types:

- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, August 18, 2011

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# For More Information



- NOAA's National Climatic Data Center: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)
  - Monthly climate reports (U.S. & Global): [www.ncdc.noaa.gov/sotc/](http://www.ncdc.noaa.gov/sotc/)
  - Billion dollar U.S. weather disasters: [www.ncdc.noaa.gov/oa/reports/billionz.html](http://www.ncdc.noaa.gov/oa/reports/billionz.html)
- NOAA's Climate Prediction Center: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)
- U.S. Drought Monitor: [www.drought.gov](http://www.drought.gov)
- Climate Portal: [www.climate.gov](http://www.climate.gov)
- PDF of this presentation:  
[www1.ncdc.noaa.gov/pub/data/cmb/sotc/webinars/NOAA\\_Climate\\_Webinar\\_August\\_2011.pdf](http://www1.ncdc.noaa.gov/pub/data/cmb/sotc/webinars/NOAA_Climate_Webinar_August_2011.pdf)